



PTO/SB/08a (05-03)

Approved for use through 04/30/2003. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	09/868,664
Filing Date	September 26, 2001
First Named Inventor	Bell
Art Unit	2121 2429
Examiner Name	Nichols
Attorney Docket Number	05222.00161

RECEIVED

JUN 17 2004

Technology Center 2100

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
M.H.	1	WO 00/04478 A2	01/27/00	Jonsson		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M.H.	2	"A Browser-Based System to Support & Deliver DE," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 1, Nov. 4-7, 1998, Doube pp 479-484	
	3	"A Fuzzy Logic-Based Intelligent Tutoring System," Information Processing 92, Vol. II, pp. 66-72, Dec. 1992, Reigan et al	
	4	"A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 307-314, Aug. 1995, Rye	
	5	"A Role for AI in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, January 1990, pp. 1-24 and 2 pgs. of references, Schaulk et al	
	6	"A Special Section -- Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, Nov.-Dec. 1994, Nowakowski, pp 3-8	
	7	"An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, Sep. 1997, Chellappa et al, pp 56-58	
	8	"An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997, Itoh et al	
	9	"Architecture of an Intelligent Tutoring System on the WWW," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 39-46 Dec. 1997, Nakabayashi et al	
	10	"Artificial Intelligence and Mathematics Education" at http://www.rand.org/hot/mcarthur/Papers/aied.html , McArthur, pp 4-8, Jan. 2000	
	11	"Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html , Murray, pp 1-35, July 2000	
	12	"Automate Your Business Plan" at www.business-plan.com/screen2.html , pp 1-4, July 2000	
	13	"Automated Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24(6), pp. 863-74, June 1994, Gonzalez et al	
	14	"Automated Training of Legal Reasoning" at http://www.bileta.ac.uk/94papers/muntjew.html , Muntjewerff, pp 4-7, Jan 1994	
	15	"BrainMaker Neural Network Application Examples" at www.calsci.com/Applications.html , 63 pages, April 1994	
	16	"Brainmaker" at www.npiec.on.ca/~echoscan/28-04.htm , July 2000, 2 pages	
	17	"Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 556-58, Dec. 1997, Robinson et al	
M.H.	18	"CAPTOR a model for delivering web based intelligent tutoring system technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5, Shreiner, 2000	



OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M.B.	19	"Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14, Prabhu, November 1995	
	20	"Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, Nov.-Dec. 1994, Montgomery et al, pp 15-20	
	21	"DDD-A Free Graphical Front-End for UNIX Debuggers," Jan. 1996, ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27, Zeller et al	
	22	"Decision Pro3.0" at www.vanguardsw.com, Vanguard Software Corporation, Jan. 2000, 14 pp	
	23	"Developing a Design System Into an Intelligent Tutoring System," Int'l J. Engr. Eud., Vol. 2(6), 341-46, Dec. 1997, Cheek et al	
	24	"Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," Jan. 1994, IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-17, Nogami et al, Jan 1994	
	25	"Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium 1996, pp. 543-549, Gonzalez et al, September	
	26	"Distributed Intelligent Tutoring on the Web," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 482-89, Dec. 1997, Brusilovsky et al	
	27	"Eight Goal-Based Scenario Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, January 1996, pp. 1-37, Schank et al	
	28	"Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994, Siemer et al	
	29	"Engines for Education" URL: http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html; viewed Feb. 15, 1999. 1994, Schank	
	30	"Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996, Taylor et al	
	31	"Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1376-83, Dec. 1995, Siemer et al	
	32	"Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144, Mitrovic et al, 2000	
✓	33	"FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, 1995 September, Foster	
✓	34	"From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-50, Dec. 1997, Livergood	
	35	"Goal-Based Scenarios and Business Training: A Conversation with Roger C. Schank," Educational Technology, Nov.-Dec. 1994, Graham, pp 27-29	
	36	"Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, Nov.-Dec. 1994, Collins, pp 30-32	
	37	"Goal-Based Scenarios", Technical Report # 36, Northwestern University, The Institute for the Learning Sciences, December 1992, pp. 1-30, Schank	
	38	"Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," Jan. 1989, IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57, Ardicel	
	39	"Intelligent Tutoring Systems: An Overview" at http://www.intellectbooks.com/authors/lawler/its.htm	
	40	"Interactive Multimedia Instructs the Individual," Oct. 1994, Occupational Health & Safety Vol. 63, No. 10, pp. 144-145, Calmicheer	
	41	"Interface design issue for advice-giving expert systems", Comm. Of the ACM, vol 30, no. 1, pp14-31, Carroll et al	
	42	"KBLPS Overview" at www.cgi.com/CGIWEB/KBLPS/overindex4.html, 13 pgs., August 1999	
	43	"Kiplinger TaxCut Press Releases" at http://www.taxcut.com/taxcut/98press_releases/pr98_nowshipping.html, pp 1-2, 12/2/98	
M.B.	44	"Learning with Computers," May 1994, Accountancy Vol. 113, No. 1209, pp. 60-64, Cole, May 1994	

RECEIVED

JUN 17 2004

Technology Center 2100



OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
U.A.	45	"Microworlds and Simuworlds: Practice Fields for the Learning Organization," Spring 1996, Organizational Dynamics Vol. 24, No. 4, pp. 36-49, <i>Keys et al</i>	
	46	"MUSE U.S. Patents" OCCAM Research Corporation, at www.muser.com/html/patents.html , <i>pp 1-2, January 2000</i>	
	47	"News for ESAP" at www.hops.wharton.upenn.edu/~esap/news.html , <i>1 page, August 1999</i>	
	48	"No More Boring CPE," July 1997, Accounting Technology, pp. 27-35, <i>Cohn</i>	
	49	"Object Lens: A "Spreadsheet" for Cooperative Work", ACM Transactions on Information Systems 1988 at www.acm.org/pubs/toc/Abstracts/tois/59298.html , <i>Lai et al, pp 332-353</i>	
	50	"Pedagogical, natural language and knowledge engineering techniques in SOPHIE I, II, and III," in Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-82, Dec. 1982, <i>Brown et al</i>	
	51	"Persistent Issues in the Application of Virtual Environment Systems to Training," August 1996, Proceedings, Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32, <i>Caird</i>	
	52	"Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," http://www.centurionsys.com/rctcl57.html , Aug. 1997, <i>Bill, pp 1-5</i>	
	53	"Practical methods for automatically generating typed links", ACM Hypertext, pp 31-41, <i>Clancy et al</i>	
	54	"Projects: FinPlan System" at www.rral.org.ru/FinPlan/ , <i>pp 1-2, July 2000</i>	
	55	"RadTutor: The Theoretical and Empirical Basis for the Design of a Mammography Interpretation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 386-393 Dec. 1997, <i>Azevedo et al</i>	
	56	"Rule-Based Programming with OPS5" at www.mkp.com/books_catalog/O-934613-51-6.asp , <i>Cooper, 1988</i>	
	57	"Simulation Technology and Parallelism in Learning Environments" at http://www.to.utwente.nl/prj/min/Book/chapter1.htm , <i>Min, pp 1-26, July 2000</i>	
	58	"Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-63, <i>Shi et al</i>	
	59	"SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 123-130, Aug. 1995, <i>Shute</i>	
	60	"Smartlaw: adapting classic expert system techniques for the legal research domain", ACM pp 133-141, <i>Hafner et al, 1993</i>	
	61	"Socialized Collaborative Learning in Multimedia Virtual Worlds" URL: http://www.iscs.nus.edu.sg/labs/learning/lels/VRML.html ; viewed Feb. 16, 1999 <i>7/18/00, pp 1-4</i>	
	62	"Task-Oriented Learning on the Web": Innovations In Education and Training International, Vol. 36, No. 1, Feb. 1999 <i>Whittington et al, pp 26-33</i>	
	63	"Teaching Real-World Analysis Skills for Goal-Based Scenario," pp. 68-74, <i>Koster, July 2000</i>	
	64	"Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 111-18 Dec. 1997, <i>Papayan et al</i>	
	65	"Teaching with the Internet" 1998, JAI Press Inc., USA. Vol no. 3, pp 217-222, <i>Heron</i>	
	66	"Technical Report: Computer Aided Education and Training Initiative" at http://advlearn.lrdc.pitt.edu/advlearn/papers/FINALREP.html , <i>Suthers, January 1998, pp 1-52</i>	
	67	"Developing a WFT Workflow System", Workflow Template, Chapter 8, 1998, pp. 8-1/8-23	
	68	"The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences, March 1993, pp. 1-58, <i>Schank et al</i>	
	69	"The Lisp Tutor," Byte, pp. 159-75, Apr. 1985, <i>Anderson et al</i>	
	70	"The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at http://www.nib.unicamp.br/recursos...education/intelligent-tutoring.html <i>McArthur et al, 1993, pp 1-42</i>	
	71	"The SimQuest Authoring System for Simulation-Based Discovery Learning," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997, <i>van Ooijen et al</i>	
	72	"The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998, <i>Kumar et al, pp 744-746</i>	
U.A.	73	"Train with Less Pain," Oct. 13, 1997, Informationweek No. 652, pp. 150-154, <i>McGee, pp 150 & 154</i>	

RECEIVED

JUN 17 2004

Technology Center 2100



OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M.H.	74	"TurboTax Deluxe Product Information" at http://www.intuit.com/turbotax/prodinfo/ttdix.html , ppd-2	
	75	"Understanding Organizational Dynamics of IT-Enabled Change: A Multipedia Simulation Approach," Winter 1997/1998, Journal of Management Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140, Mauroni et al	
	76	"User-Sensitive Multimedia Presentation System," IBM Technical Disclosure Bulletin, March 1, 1996, Vol. 39, No. 3, pp. 93-94	
	77	"Using Planning Techniques to Provide Feedback in Interactive Learning Environments," Proc. Sixth Int'l Conf. On Tools with Artificial Intelligence," pp. 700-03, Nov. 1994, Kemp et al	
	78	"Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-65, Dec. 1997, Kemp	
	79	"Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Autumn 1998, Personnel Psychology Vol. 51, No. 3, pp. 767-71, Schank	0997
	80	"What are Intelligent Coaching Systems and Why are they (in)evitable?" IEEE Colloquium on Artificial Intelligence in Educational Software, pp. 2/1-2/5, June 1998, Breulcer	
	81	"Why Should the Teens Have All the Best Games? Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 17 th , 1996, ppd-2	
	82	"WITS: A Reusable Architecture for a VR-Based ITS" at http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html , Tam et al, 6/10/96, ppd-5	
	83	"Computer Dictionary", 1997, Microsoft Press, 3 rd Ed., pp. 264, 276, 383, 446, 462, 507.	
	84	"Flexible Learning", Feb. 1998, Credit Union Management Vol. 21, No. 2, pp. 32-33, 38, Grayling	Proprietary
	85	"The Prototype of the Virtual Classroom", Interactive Multimedia Distance Learning (IMDL): NLI Viewpoint, Fall/Winter 1997, Wilson et al, ppd-9	
	86	"Multimedia Training... Get Lemonade, Not a Lemon!" June 1997, Journal for Quality and Participation vol. 20, No. 3, pp. 22-26, Burns	
M.H.	87	"The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer. A Success Story", 1996, Seagen et al, pp 502-507	

Examiner Signature	<i>M.H.</i>	Date Considered	January 3, 2006
--------------------	-------------	-----------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

JUN 17 2004

Technology Center 2100